

REMARKS

Reconsideration of this application, as presently amended, is respectfully requested.

Claims 1-6 are pending in this application. Claims 1-6 stand rejected.

Claim Rejection-35 U.S.C. §103

Claims 1-6 are rejected under 35 U.S.C §103 as being unpatentable over **Joanblanq** (USP 6,947,097) in view of **Konuma** (USP 7,023,490). Claims 1-6 are rejected under 35 U.S.C §103 as being unpatentable over **Joanblanq** (USP 6,947,097) in view of **Ebihara** (USP 5,956,092). For the reasons set forth in detail below, these rejections are respectfully traversed.

The **Joanblanq** reference discloses a process for detecting black bands in a video image, such as horizontal black bars (i.e., letterbox format) at the top and bottom of a television image. More particularly, **Joanblanq** discloses a process for detecting black bands in a video image within a luminance range corresponding to low luminance values including (1) calculating, for respective lines situated in the usual location of a black band, a value related to a maximum number of points having the same luminance value; (2) averaging the calculated values for the lines; (3) calculating a threshold dependent on the average; and (4) comparing a value related to a maximum number of points having the same luminance value for a new line with the calculated threshold. See, e.g., Abstract and col. 1, lines 29-40.

Joanblanq states that an advantage of the process is reliable detection of black bands, and hence the “letterbox format”, even if the video lines outside the black bands is much the same as the level of the black (see col. 2, lines 5-13). However, **Joanblanq** discloses only one

use of the process for detection of the black bands, that is, triggering an automatic zoom by the detection of horizontal bars so as to display a full-screen image (see col. 2, lines 44-47).

The **Konuma** reference discloses a picture processing apparatus and method for a television receiver that performs multiple picture display and a reduced picture display. More specifically, the **Konuma** reference determines whether an input video signal is a full line signal or a video signal that contains non-picture portions, such as a video signal having side panel portions or a video signal having letterbox portions. In the case the input video signal is a side panel signal or a letterbox signal, when the multiple picture display process or the reduced picture display process is performed, only a video signal of the effective picture area is extracted from the video signal (see col. 6, lines 44-52 and Figs. 6A and 6B).

Thus, in accordance with the **Konuma** reference, when the multiple-picture displaying process or the reduced picture displaying process is performed, if an input video signal is a side panel signal or a letter box signal, only a video signal corresponding to the effective picture area is extracted from the input video signal and displayed. As a result, when the multiple-picture displaying process is performed, a picture formed with a side panel signal or a letter box signal can be prevented from becoming small. When the reduced picture displaying process is performed, a wasteful portion can be prevented from being displayed. See col. 7, lines 26-36.

By way of example, as shown in Fig. 7A-7C, when a video signal corresponding to only the effective picture area is extracted from a video signal having side panels S1, the size of the picture G1 formed from the signal S1 is the same as the full-line signal. In contrast, as shown in

Figs. 3A-3C, if the side panels are not removed prior to displaying the multiple pictures, the picture having the side panels becomes smaller due to the side panel portions.

Ebihara et al. discloses a television receiver that can automatically control the aspect ratio of an incoming video signal. More particularly, according to **Ebihara et al.**, a picture signal analysis circuit 101 analyses whether or not pictures represented by the incoming video signals have upper and lower noneffective mask regions. The picture analysis circuit 101 outputs a signal to an aspect converting circuit 102 to convert the aspect to provide an optimal or most desirable aspect (see, e.g., col. 9, lines 31-50). The aspect converting circuit has various modes of changing the aspect, as described e.g., in col. 10, lines 5-67 of **Ebihara et al.**

It is noted that the picture analysis circuit 101 includes a calculation circuit 5 (see col. 12, lines 47-50) that differentiates the distribution of luminances of extracted signal segments along vertical picture line regions (see col. 14, lines 37-41). Further, **Ebihara et al.** teaches that the picture analysis circuit 101 may be operated, e.g., in response to a channel change (see col. 12, lines 14-21).

Claims 1 and 2

It is respectfully submitted that **Joanblanq** does not disclose or suggest any of the elements recited in claims 1 and 2. Specifically, **Joanblanq** does not disclose or suggest “*means for judging, when channels are switched, whether or not a letter box [side panel] is displayed on the previous channel and is also displayed on the new channel*” and “*means for moving, in response to judging that the letter box [side panel] is displayed on the previous channel and is*

also displayed on the new channel, the position of the letter box [side panel] displayed on the new channel from the position of the letter box [side panel] displayed on the previous channel”.

Although **Joanblanq** generally discloses a process for judging whether black bands are displayed in a video image, **Joanblanq** is completely silent regarding judging, when channels are switched, whether a letterbox [side panel] is displayed on a previous channel and a new channel, and moving the position of the letter box [side panel] when it is judged that the letter box [side panel] is displayed on the previous channel and is also displayed on the new channel.

Further, it is respectfully submitted that the Examiner has not pointed out where **Joanblanq** disclose the above-noted features recited in claims 1 and 2 (see Office Action, page 2).

The **Konuma** reference does not alleviate any of the deficiencies of **Joanblanq**. More particularly, **Konuma** does not teach *judging, when channels are switched, whether or not a letter box [side panel] is displayed on the previous channel and is also displayed on the new channel*. Although **Konuma** discloses determining whether the input video signal is a side panel signal or a letterbox signal, **Konuma** does not judge whether a letter box [side panel] is displayed on a previous channel and a new channel when channels are switched.

Further, **Konuma** teaches displaying only a video signal corresponding to the effective picture area and removing side bands when multiple pictures are displayed. Thus, it may be reasonable to say that **Konuma** moves (or removes) the position of a letterbox when it is determined that (1) multiple pictures are to be displayed or a reduced picture is to be displayed and it is determined that (2) the video image includes side panels or letterbox.

However, **Konuma** does not disclose or suggest moving the position of the letterbox [side panel] in response to judging that the letterbox [side panel] is displayed on the previous channel and is also displayed on the new channel.

Finally, **Ebihara et al.** teaches changing the aspect according to various predetermined modes when a picture analysis circuit 101 detects noneffective mask regions and that the picture analysis circuit 101 may be operated, e.g., in response to a channel change. However, **Ebihara et al.** do not disclose or suggest that the position of the letterbox [side panel] is moved in response to judging that the letterbox [side panel] is displayed on the previous channel and is also displayed on the new channel.

Claims 3 and 4

Claims 3-4 have been amended is to recite “means for moving the display position of the letter box by one pixel in response to the calculation means calculating that the average value of the luminances is lower than a predetermined value”.

With respect to claims 3 and 4, **Joanblanq** teaches “calculation means for calculating, when a letter box [side panel] is displayed, the average value of luminances in areas respectively composed of upper and lower side edges in the television program video” (see discussion of **Joanblanq** above). Further, **Joanblanq** discloses that the process for detection of the black bands may be used to trigger an automatic zoom by the detection of horizontal bars so as to display a full-screen image (see col. 2, lines 44-47). The automatic zoom would appear to remove the letterbox.

Further, **Ebihara et al.** appears to disclose that the calculation circuit 5, which is part of the picture analysis circuit 101, detects noneffective mask regions based on average values of luminances in upper and lower regions of a video (see, e.g., col. 19, lines 21-43).

However, it is respectfully submitted that none of the references disclose or suggest “means for moving the display position of the letter box by one pixel in response to the calculation means calculating that the average value of the luminances is lower than a predetermined value”. By moving the display position of the letterbox [side panel] by a small amount (one pixel), the change is not troublesome to the viewer.

Claims 5 and 6

With respect to claims 5 and 6, it is respectfully submitted that none of **Joanblanq, Konuma and Ebihara et al.** disclose or suggest “scene change detection means for detecting, when a letter box [side panel] is displayed, that a scene change occurs” and “means for moving a display position of the letter box [side panel] in response to the scene change detection means detecting that the scene change occurs”.

First, it is noted that the Office Action has not pointed out where any of the references disclose or suggest the “scene change detection means” and “means for moving a display position...in response to the scene change detection means...”. The Office Action is required to be complete, which includes pointing out where the reference(s) teach(es) the claimed elements (see 37 C.F.R. §1.104 and MPEP §707.07). Accordingly, the Examiner is respectfully requested

to either point out where the references teach the features recited in claims 5 and 6 or withdraw the rejection.

As discussed above, each of the references teaches adjusting (or removing) the letterbox or side panels based on criteria different from detecting a scene change. That is, unlike the claimed invention, **Konuma** moves (or removes) the position of a letterbox (by removing the letterbox) when it is determined that (1) multiple pictures are to be displayed or a reduced picture is to be displayed and it is determined that (2) the video image includes side panels or letterbox.

Further, **Ebihara et al.** can change the aspect ratio when a picture analysis circuit 101 is triggered in response to a channel change and then detects noneffective mask regions. However, **Ebihara et al.** does not detect a scene change when a letter box [side panel] is displayed and move a display position of the letterbox [side panel] in response to detecting the scene change.

Accordingly, for all of the reasons set forth above, it is submitted that each of claims 1-6 patentably distinguishes over the cited prior art. Reconsideration and withdraw of the rejections under §103 are respectfully requested.

CONCLUSION

In view of the foregoing amendments and accompanying remarks, it is submitted that all pending claims are in condition for allowance. A prompt and favorable reconsideration of the rejection and an indication of allowability of all pending claims are earnestly solicited.

Application No. 10/830,027
Art Unit: 2622

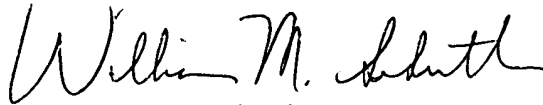
Amendment under 37 C.F.R. §1.111
Attorney Docket No.: 042360

If the Examiner believes that there are issues remaining to be resolved in this application, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite and complete prosecution of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read "William M. Schertler". The signature is fluid and cursive, with the first name "William" being the most prominent.

William M. Schertler
Attorney for Applicants
Registration No. 35,348
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

WMS/dlt